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ABSTRACT

The effects of four two-hour study skills seminars on study organization, study techniques, and study motivation were investigated for 1977 fall semester resident freshmen at York College of Pennsylvania. Forty-four interested volunteers were divided equally into a treatment and control group on the basis of pretest scores on the Study Techniques Survey, Study Organization Survey, and Study Motivation Survey, sex, age, class status, and high school rank. All subjects were posttested immediately following the final seminar of the workshop. Statistical T-analysis revealed that those resident freshmen participating in the study skills workshop significantly improved in all three study skills areas tested as compared to the control group. It was recommended that an ongoing campus-wide developmental course in study skills be established, and that further research on study skills programming examine the resulting effects on overall satisfaction, grades and attrition rates. (Author/LBH)

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The Effects of a Study Skills Workshop Upon Study Techniques, Study Organization, and Study Motivation For Resident Freshmen

CORE MODULE

Curriculum Development

BEST COPY AVAILABLE

by

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Eastern Pennsylvania

A PRACTICUM PRESENTED TO NOVA UNIVERSITY
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DEGREE OF DOCTOR OF EDUCATION

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ABSTRACT

Mussano, Frank P. The Effects of a Study Skills Workshop Upon Study Techniques, Study Organization, and Study Motivation For Resident Freshmen. Research Practicum Presented to Nova University in Partial Fulfillment of the Requirements for the Degree of Doctor of Education, October 25, 1977.

This study examined the effects of four two-hour study skills seminars upon study organization, study techniques, and study motivation for 1977 fall semester resident freshmen at York College of Pennsylvania. Forty-four interested volunteers were divided equally into a treatment and control group on the basis of pretest scores on the Study Techniques Survey, Study Organization Survey, and Study Motivation Survey, sex, age, class status, and high school rank. All subjects were posttested immediately following the final seminar of the workshop. Statistical t analysis revealed that those resident freshmen participating in the study skills workshop significantly improved in all three study skills areas tested as compared to the control group.

It was recommended that an ongoing campus-wide developmental course in study skills be established, and that further research on study skills programming examine the resulting effects upon overall satisfaction, grades, and attrition rates.

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INTRODUCTION

Statement of the Problem

This paper examined the effects of four two-hour study skills seminars upon study organization, study techniques, and study motivation for 1977 fall semester resident freshmen at York College. Three basic questions were studied:

1) Was there a significantly higher mean pretest-posttest difference score on the Study Techniques Survey for those students exposed to the study skills workshop as compared to the mean pretest-posttest difference score of an equally matched control group?

2) Was there a significantly higher mean pretest-posttest difference score on the Study Organization Survey for those freshmen exposed to the study skills workshop as compared to the mean pretest-posttest difference score of an equally matched control group?

3) Was there a significantly higher mean pretest-posttest difference score on the Study Motivation Survey for those students participating in the study skills workshop as compared to the mean pretest-posttest difference score of an equally matched control group?

Significance to York College

As is typical of all institutions of higher education in the late 1970's, York College of Pennsylvania found itself deeply engrossed in the movement towards egalitarianism. The effect has been a proliferation of a wide variation in academic backgrounds for newly admitted

students. Just as the College Entrance Examination Board has noted a lowering of scores on the Scholastic Aptitude Test, many institutions have found that a large number of newly admitted students do not have the academic background necessary to ensure reasonable success in higher education. If adaptive measures are not initiated to assist this new type of student, the ultimate effects upon attrition rate and/or quality of education could be disasterous.

The Residence Council of York College noted that the attrition rate for resident freshmen has been relatively heavy during the past few years. The Office of Student Affairs observes that ultimately 52% of recent freshmen classes have eventually "dropped out" from the college roster (Call, 1976). Among other reasons for this attrition rate, the Residence Council suggests that a main contributing factor could be a lack of developed study skills. The Council agreed to support a study which would confirm the assumed relationship between study skills and grade point average for resident freshmen. The findings and recommendations of the resulting survey which was administered to all 247 freshmen residents during the 1977 spring semester were as follows:

"The results indicated that a clear positive correlation existed between Study Organization Survey scores and G.P.A. A significant positive relationship between Study Techniques Survey results and G.P.A. was also established. Questions regarding organization of one's study area produced a slightly higher percentage of incorrect responses as compared to those items dealing with effective use of one's study time on the

Study Organization Survey. The subcategories of the Study Techniques Survey which produced the largest percentage of incorrect responses were respectively: taking class notes, taking tests, writing reports, preparing for tests, and reading textbooks. It was recommended that a study skills workshop be developed for resident freshmen. Subscale responses should be utilized in establishing goals and priorities." (Mussano, 1977)

Upon receipt of the above results, the York College of Pennsylvania Residence Council allocated $80 for hiring a faculty member to conduct an experimental study skills workshop consisting of four two-hour seminars to be scheduled during the first two weeks of the 1977 fall semester. Results of this study were presented to the Curriculum Committee of the Academic Senate as a means of encouraging a campus wide developmental course in study skills.

BACKGROUND AND SIGNIFICANCE

A wide variety of studies suggesting a high positive relationship between study skills and general academic achievement have been reported in the recent professional literature. For example, Weinstein and Gipple (1974) administered Wrenn's Study-Habits Inventory (SHI) to 104 freshmen and 78 sophomores at the University of Washington School of Medicine. Undergraduate grade-point averages, Medical College Admissions Test scores, and number of failing grades were then gathered on all participants. It was found that study-skills scores were highly related to achievement measures, and the relationship between study-skills score and achievement was greater for freshmen than for sophomores. Also, study-skill factors aided in the prediction of failures.

Entwistle and Wilson (1970) administered the Eysenck Personality Inventory and a questionnaire measuring study methods and motivation to 72 graduates at Aberdeen University. The total group was divided into three equal groups - "good honors", "honors/ordinary", and "poor ordinary." The more successful students rated significantly higher than the poorer students on both study methods and motivation.

Hewitt (1973) administered the Study Habit Biographical Questionnaire, which includes 48 items on study habits, study difficulties, and biographical data to all entering freshmen at a British University. The 93 women and 153 men were divided into three academic levels, and differences between the top and bottom thirds were tested using the chi-

square technique. The more successful students in comparison with the less successful students used books and libraries more frequently, had less difficulty concentrating on their studies, and had received training in note taking.

McClausland and Steward (1974) administered three measures of academic attitudes and study skills - the Survey of Study Habits and Attitudes (SSHA), a 30-item test by Russell, and a 9-item test by Myers - to 47 men and 59 women near the end of an introductory psychology course. Scores were compared with first semester grade-point averages using analyses of variance and multiple linear regressions. Results indicated that the four primary SSHA scales (delay avoidance, teacher approval, work methods, and educational acceptance) accounted for 18 per cent of the variance in first-semester college G.P.A., while the full-scale study orientation score accounted for 16 per cent.

An attempt was made to determine if different study strategies were used by successful and unsuccessful students in the same major field. At the University of California, Riverside, 538 upperclass students majoring in the physical sciences, biological sciences, social sciences, and humanities, filled out a 64-item study skills questionnaire (Goldman and Warren, 1973). Respondents were divided into "successful" and "unsuccessful" groups on the basis of self-reported grade-point average. The students with above average grades appeared to be more diligent in their study habits, and showed more cognitive activity than those with below average grades.

Current research has demonstrated the relationship between effective study techniques, a major factor of study skills development, and academic achievement in specific courses. For example, at the University of New Mexico (Fisher and Harris, 1973), 83 women and 29 male students enrolled in human growth classes were randomly assigned to a 40 minute lecture, a 10 minute review period, and a 30 minute testing period under one of the five following conditions: no note taking with review of the lecturer's notes, no note taking with mental review, note taking with mental review, note taking with review of their own notes, and note taking with review of the lecturer's notes. A 15 minute follow up test was administered three weeks after the immediate testing. The researchers concluded that the quality of the notes taken was positively correlated with free recall or objective testing.

A lecture on behavior modification was presented to four separate sections of a sohpomore human growth and development course (Annis and Davis, 1975). Three sections received instructions on note taking, while one section received no instructions and were not allowed to review their notes prior to an examination. Students in the instructed sections were either told to take their own notes, or lecturer's notes were provided. The final results indicated that encoding by note taking or using lecturer's notes and review of either set of notes were both associated with higher examination scores. The students who had only mental review or no review did relatively poorly on the exam.

A second factor found in proficient study skills development is

study organization. Wagstaff and Mahmoudi (1976) surveyed a random sample of lower-division students majoring in science and engineering at the University of Utah concerning number of hours spent studying per week, number of hours spent working per week, and several other items about study organization and approaches. The replies of the 190 students for whom high school grade-point average (G.P.A.) and American College Test (A.C.T.) scores were available were analyzed to predict current G.P.A. The most powerful predictor was found to be extent to which assignments were completed before examinations, followed in order by A.C.T. score, estimated hours of study per week, and high school G.P.A.

Hinrichsen (1972) surveyed 144 students in an introductory psychology class during the eighth week of the semester concerning their average amount of daily study time, the average number of interruptions during study periods, the average number of days per week in which study occurred, the average amount of time in each study period, and the average length of each interruption. They then completed the Anxiety Differential, the Achievement Anxiety Test, and the Test Anxiety Scale. While the best single predictor of G.P.A. was S.A.T.-Verbal score, predictive accuracy was significantly increased when effective study time per week and facilitating test anxiety score were combined with S.A.T.-Verbal score in the predictive equation.

The professional literature also suggests a third aspect of study effectiveness which relates to academic achievement - motivation. Packwood (1973) administered the 40-item Motivation Check-Sheet to 703 en-

tering freshmen males and females at a junior college attached to the University of Minnesota. A regression equation using the high school rank and American College Test scores of all 1,085 entering freshmen to predict the 1968 fall quarter grades was used to divide the sample students into overachievers and underachievers. Two-tailed z tests showed that 27 items significantly discriminated between the underachievers and the overachievers for the men or the women or both.

Sizemore (1969) developed a semantic differential scale based on achievement motivation concepts and administered it to 944 freshman at Northeastern State College. Students were then grouped according to academic aptitude and sex. Multiple correlations between grades and semantic differential scale scores which were significant at or above the .05 level of confidence were found for each group of subjects. The conclusions were that the semantic differential technique constructed from achievement motivation concepts can predict grades, but the scale devised here is unsatisfactory for predictive purposes.

The literature suggests that students themselves believe that study skills play an important role in academic achievement. Pauk (1972) surveyed 600 randomly chosen college freshmen and asked them to rank, in order of importance, 14 items that have an influence on academic achievement. Instructors, parents, high school preparation, study skills, and friends were the five items ranked highest by both males and females.

Several institutions, both public and private have begun to realize the effect that study skills proficiency can have upon academic achieve-

ment. As a result, the literature reports many examples of counseling sessions and workshops which have demonstrated success in improving the study skills of college students, most notably freshmen. For example, Richards (1976) assigned eighty-seven students from a psychology course who were concerned about their study habits to a no-contact control group, a no treatment control group, a study skills advice group, or one of six study skills advice plus self-monitoring groups. He found that the combined -treatment groups improved their examination grades from pre- to post-treatment more than did the study skills advice group, which in turn did better than the control groups.

Finally, Jackson and Van Zoost (1974) developed an eight-session study skills program in which thirty university students participated. The students evaluated their own performance on various exercises throughout the program, and half of the students also taught study skills material to a friend. Both groups improved their scores on the Suinn Test Anxiety Behavior Scale, the Survey of Study Habits and Attitudes, and a Study Skills Inventory before and after the program. However, the teaching group showed more improvement than did the nonteaching group on the S.S.I. and the S.S.H.A.

Summary of the Literature

The current professional literature suggests the following:

1) Several studies indicate a high positive correlation between proficient study skills and general academic achievement for college students.

2) Research has demonstrated that proficient study techniques, an aspect of overall study skills, have a positive relationship upon academic achievement.

3) A second important factor with regard to study skills which also relates to academic achievement is study organization.

4) Research suggests that a third aspect of study effectiveness which relates to academic achievement is motivation.

5) Students themselves believe that study skills have a direct bearing upon general academic success.

6) Counseling sessions and workshops at various institutions have significantly improved the study skills of students, most notably freshmen.

With this in mind, the researcher attempted to develop an experimental study skill workshop consisting of four two-hour sessions to significantly improve the study techniques, study organization and study motivation for resident freshmen. Significant results were to be used as justification for the establishment of an enlarged, campus wide developmental study skills course.

PROCEDURE

Definition of Terms

1) Control subjects - 22 randomly chosen resident freshmen who volunteered for participation in the study skills workshop, but were not assigned to the treatment group. They were matched with the experimental subjects on the basis of class status, sex, age, high school rank and pre-test scores.

2) Dependent variables - scores on the Study Techniques Survey, Study Organization Survey, and Study Motivation Survey.

3) Experimental subjects - 22 randomly selected freshmen resident volunteers who registered for participation in the study skills workshop and were exposed to four two-hour seminars during the first two weeks of classes.

4) Freshmen - new entering students who have no earned college credit.

5) Independent variable - participation in the study skills workshop.

6) Intervening variables - values, maturation, socioeconomic status, social adjustment, intelligence, coursework, and instructor effectiveness.

7) Resident student - a student living in college owned housing.

8) Study motivation - score on the Study Motivation Survey developed by Dr. William F. Brown (1965) which assesses common problems arising from an indifferent or negative attitude about the value of educa-

tion, and common problems stemming from negativism or indifference toward teachers.

9) Study organization - score on the Study Organization Survey developed by Dr. William F. Brown (1965) which assesses effective use of one's study time, and efficient organization of one's study area.

10) Study skills - separate scores on Study Techniques Survey, Study Organization Survey, and Study Motivation Survey.

11) Study skills workshop - an organized presentation of study skills utilizing lecture, discussion, and model reinforcement based on a model by G. Brian Jones (1969) entitled "Improving Study Behaviors". The entire workshop will be conducted during four separate two-hour evening sessions to be scheduled within the first two weeks of the 1977 fall semester. Utilizing Mr. Jones' terminology, the following topics will receive time emphasis designated below. These priorities of time were established from the results of a study skills survey conducted among freshmen residents during the 1977 spring semester (Mussano, 1977):

Topics in order of priority	Time emphasis
Note-taking behavior	2 hours
Assingment procedure	2 hours
Examination behavior	1 hour
Study procedures	1 hour
General study behavior: place	1 hour
General study behavior: time	1 hour

12) Study techniques - score on the Study Techniques Survey developed by Dr. William F. Brown (1965) which assesses common problems associated with reading textbooks, taking class notes, writing reports, preparing for tests, and taking tests.

Limitations of the Study

1) The extent to which scores on the Study Techniques Survey, Study Organization Survey, and Study Motivation Survey accurately reflect study skills proficiency limited the validity of this study.

2) Any of the intervening variables from social adjustment to values may have limited the accuracy of this study.

3) The general attitude of the subjects in the study at the time the instrument is administered may have limited the accuracy of this study.

4) The extent to which York College freshmen residents reflected the characteristics of students enrolled at other institutions limited the external generalization of results.

5) The fact that the sample was selected from a restricted population - volunteer resident freshmen - limited the generalization of results.

6) Since the study utilized relatively small sample of 20 experimental subjects and 20 control subjects, the possibility of contamination was high.

7) The extent to which the control group adequately reflected the characteristics of the experimental group before treatment affected the

validity of the study.

8) The extent to which the 1977 freshmen residents reflected the characteristics of future freshmen classes affected the external generalization of results.

9) The fact that 6 members of the treatment group and 7 members of the control group did not complete the program properly affects the validity of this study.

Basic Assumptions

1) It was assumed that the Study Techniques Survey accurately measured common problems associated with reading textbooks, taking class notes, writing reports, preparing for tests, and taking tests.

2) It was assumed that the participants validly responded to the measuring instruments.

3) It was assumed that the Study Organization Survey accurately measured effective use of one's study time, and efficient use of one's study area.

4) It was assumed that none of the intervening variables adversely affected the validity of this investigation.

5) It was assumed that the investigation of a rather small group of subjects yielded results indicative of a larger population.

6) It was assumed that the experimental and control groups were equal before treatment.

7) It was assumed that the Study Motivation Survey accurately measured problems arising from an indifferent or negative attitude

about the value of education and common problems stemming from negativism or indifference toward teachers.

8) It was assumed that students who volunteered for the study had reasonable room for improvement of their study skills.

9) It was assumed that the study skills workshop focused upon common problem areas of those students in the experimental group.

10) It was assumed that the instructor hired to conduct the workshop followed the established guidelines, and performed in accordance with acceptable standards.

Assessment Instruments

The three assessment devices utilized in this investigation were: 1) Study Organization Survey, 2) Study Techniques Survey, and 3) Study Motivation Survey, all developed by William F. Brown, Ed.D., and published by Effective Study Materials, P.O. Box 603, San Marcos, Texas. The Manual of Directions (Brown, 1965) points out the following:

"Questions on the Study Organization Survey are divided equally between two problem areas. Questions 1-10 deal with common problems connected with effective use of one's study time; questions 11-20 deal with common problems associated with efficient organization of one's study area.

The twenty-question Study Techniques Survey provides four questions for each of five different problem areas. Questions 1-4, 5-8, 9-12, 13-16, and 17-20 deal, respectively, with the most common prob-

lems associated with reading textbooks, taking class notes, writing reports, preparing for tests, and taking tests.

Questions 1-14 on the Study Motivation Survey deal with common problems arising from an indifferent or negative attitude about the value of education. Common problems stemming from negativism or indifference towards teachers are covered by questions 15-20." (p.1)

Validity and reliability coefficients for the instrument are outlined below:

a) validity - During the fall semester of 1962 and 1963, 1,473 freshmen enrolled at Southwest Texas State College received composit scores on the American College Test, first semester grade-point averages for academic courses, and Study Skills Surveys scores. Resulting validity coefficients ranged from .18 to .55.

b) reliability - Test-retest coefficients following a four week interval ranged from .89 to .93 for each of the subscales of the Study Skills Surveys.

Procedures for Collecting the Data

1) During the 1977 fall registration period, a letter was forwarded to all resident freshmen inviting them to register for the free study skills workshop (see appendix). The announcement was also made verbally during the freshman orientation program. Interested individuals were asked to contact the Office of Student Activities.

2) Those students reporting to the Office of Student Activities

to enroll in the study skills workshop were given a registration form, a copy of the Study Techniques Survey, the Study Organization Survey, the Study Motivation Survey, and an answer sheet, all of which were to be completed before the candidate was accepted.

3) Of the 44 eligible candidates, 22 were assigned to the experimental group. 22 subjects were matched to those in the experimental group on the basis of sex, age, class status, high school rank, and pretest scores. The Records Office provided the required data noted above.

4) The answer sheets returned by the 22 experimental and 22 control subjects were scored in accordance to the procedures outlined in the Study Skills Surveys Manual of Directions (Brown, 1965).

5) Each of the experimental subjects were contacted by memo at the end of registration week, and were asked to meet with the study skills instructor at a specific free time period. The group then developed a meeting schedule to ensure that no conflicts existed. The control subjects were notified that they would be involved in a second study skills workshop which would meet immediately after the first group completed the course.

6) The experimental group was exposed to four two-hour study skills seminars based on a model by G. Brian Jones (1969). The following topics, as defined by Mr. Jones, received the time appropriations as follows: 1) Note taking behavior - 2 hours; 2) Assignment procedure - 2 hours; 3) Examination behavior - 1 hour; 4) Study procedure - 1 hour; 5) General study behavior: place - 1 hour; 6) General study behavior: time - 1 hour.

7) At the conclusion of the final seminar, the experimental group was administered the Study Techniques Survey, the Study Organization Survey, and the Study Motivation Survey as posttests. Control subjects were posttested when they appeared for the second study skills workshop which began immediately after the conclusion of the first workshop.

8) The posttest answer sheets for all subjects were scored in accordance with the procedures outlined in the Study Skills Surveys Manual of Directions (Brown, 1965).

9) For all subjects, pretest scores were subtracted from posttest results to determine pretest-posttest difference scores.

10) Pretest-posttest difference scores on all three surveys for the experimental group and the control group were then recorded. From the treatment group, 16 usable sets of scores were gathered while 15 difference scores on all three surveys were produced from the control group.

Procedures for Treating the Data

1) A t test was utilized to compare the mean of the experimental group's pretest-posttest difference scores on the Study Techniques Survey with the mean of the control group's difference scores. The following null hypothesis was tested:

There is no significant difference between the mean of the pretest-posttest difference scores of the experimental group and the control group on the Study Technique Survey.

Null Hypothesis	$H_o : \bar{x}_1 = \bar{x}_2$
Alternate Hypothesis	$H_a : \bar{x}_1 > \bar{x}_2$
Level of Significance	$\alpha = .05$
Critical t Value	1.699
Degrees of Freedom	29
One Tailed Test	.95 percentile value

H_o must be rejected and H_a accepted if $t > 1.699$.

2) A t test was utilized to compare the mean of the experimental group's pretest-posttest difference scores on the Study Organization Survey with the mean of the control group's difference scores. The following null hypothesis was tested:

There is no significant difference between the mean of the pretest-posttest difference scores of the experimental group and the control group on the Study Organization Survey.

Null Hypothesis	$H_o : \bar{x}_1 = \bar{x}_2$
Alternate Hypothesis	$H_a : \bar{x}_1 > \bar{x}_2$
Level of Significance	$\alpha = .05$
Critical t Value	1.699
Degrees of Freedom	29
One Tailed Test	.95 percentile value

H_o must be rejected and H_a accepted if $t > 1.699$.

3) A t test was utilized to compare the mean of the experimental

group's pretest-posttest difference scores on the Study Motivation Survey with the mean of the control group's difference scores. The following null hypothesis was tested:

There is no significant difference between the mean of the pretest-posttest difference scores of the experimental group and the control group on the Study Motivation Survey.

Null Hypothesis	$H_o : \bar{x}_1 = \bar{x}_2$
Alternate Hypothesis	$H_a : \bar{x}_1 > \bar{x}_2$
Level of Significance	$\alpha = .05$
Critical t Value	1.699
Degrees of Freedom	29
One Tailed Test	.95 percentile value

H_o must be rejected and H_a accepted if $t > 1.699$.

RESULTS

The data resulting from the study is as follows:

TABLE I

ANALYSIS OF STUDY TECHNIQUES SURVEY SCORES

Experimental Group	Control Group
$n_x = 16$	$n_y = 15$
$\Sigma_x = 116$	$\Sigma_y = 20$
$\Sigma_{x^2} = 1168$	$\Sigma_{y^2} = 36$
$\sigma_x = 7.250$	$\sigma_y = .816$
$\bar{x} = 4.669$	$\bar{y} = 1.333$

Critical t value = 1.699.

Calculated t value = 4.830.

The above table records the calculated statistics comparing the mean of the pretest-posttest difference scores of the experimental and control groups on the Study Techniques Survey. Designated respectively from top to bottom are: the number in each group; sum of scores; sum of scores squared; standard deviation; and mean. Since the calculated t value exceeds the critical t value at the .05 level the null hypothesis was rejected. The researcher concluded that those freshmen residents exposed to the study skills workshop tended to significantly improve their study techniques as compared to those freshmen residents not enrolled in the program.

TABLE II

ANALYSIS OF STUDY ORGANIZATION SURVEY SCORES

Experimental Group	Control Group
$n_x = 16$	$n_y = 15$
$\Sigma_x = 66$	$\Sigma_y = 29$
$\Sigma_{x^2} = 454$	$\Sigma_{y^2} = 85$
$\sigma_x = 3.480$	$\sigma_y = 1.437$
$\bar{x} = 4.125$	$\bar{y} = 1.933$

Critical t value = 1.699.

Calculated t value = 2.262.

The above table records the calculated statistics comparing the mean of the pretest-posttest difference scores for the experimental and control groups on the Study Organization Survey Scores. Designated respectively from top to bottom are: the number in each group; sum of scores; sum of scores squared; standard deviation; and mean. Since the calculated t value exceeds the critical t value at the .05 level, the null hypothesis was rejected. The researcher concluded that those freshmen residents exposed to the study skills workshop tended to significantly improve upon study organization skills as compared to those who were not enrolled in the program.

TABLE III

ANALYSIS OF STUDY MOTIVATION SURVEY SCORES

Experimental Group	Control Group
$n_x = 16$	$n_y = 15$
$\Sigma_x = 90$	$\Sigma_y = 40$
$\Sigma_{x^2} = 590$	$\Sigma_{y^2} = 154$
$\sigma_x = 2.362$	$\sigma_y = 1.838$
$\bar{x} = 5.625$	$\bar{y} = 2.666$
Critical t value = 1.699.	
Calculated t value = 3.670.	

The above table records the calculated statistics comparing the mean of the pretest-posttest difference scores of the experimental and control groups on the Study Motivation Survey. Designated respectively from top to bottom are: the number in each group; sum of scores; sum of scores squared; standard deviation; and mean. Since the calculated t value exceeds the critical t value at the .05 level, the null hypothesis was rejected. The researcher concluded that those freshmen residents exposed to the study skills workshop tended to significantly improve upon study motivation as compared to an equally matched group of freshmen residents involved in the program.

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

It is clear that those resident freshmen participating in the study skills workshop significantly improved in the areas of study techniques, study organization and study motivation as compared to an equally matched control group not involved in the program. These results agree with much of the research reported in the current professional literature which suggests that significantly improved study methodology can result from specific workshop programming.

The results of this study have been presented to the Curriculum Committee of the Academic Senate in the hope of establishing an annual ongoing study skills workshop for entering freshmen, and encouraging the eventual creation of a campus-wide developmental course in study skills available to all interested students. It is conceivable that such a program may offer assistance to the less prepared student by sharpening essential skills, improving motivation, and in effect, enhancing the students' overall educational experience at York College.

Finally, the success of this rather limited study should spur additional research at York College in the area of study skills development and its effect upon overall academic success. For example, one might wish to conduct a large scale study skills workshop, utilizing a pretest-posttest control group design, and then conduct a longitudinal study to determine the program's effect upon grades,

overall satisfaction, and attrition rate.

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APPENDIX A

Announcement Letter

YORK COLLEGE OF PENNSYLVANIA

Country Club Road, York, Pennsylvania 17405 Telephone (717) 846-7788

September 6, 1977

Dear Freshman Resident:

Several research studies conducted here at York College during the past two years have clearly demonstrated that effective study skills have a direct relationship to grades, especially for freshmen. As a result, the Residence Council, a student group, is funding an informal, professional study skills workshop, conducted by a faculty member, which will meet for four two-hour sessions at a mutually convenient time during the next three weeks. The program is free for any resident freshman, but we must insist that participants attend all four sessions.

If you believe that your study skills can be improved, and you would like to participate in the program with other freshmen who feel the same way, stop by the Office of Student Activities, Student Center Building and complete the registration form before Friday, September 9. Those students selected for the program (enrollment is very limited) will be contacted early during the week of September 12.

We hope to hear from you soon.

Sincerely,

Frank Mussano

Frank Mussano
Director of Student Activities

FM/cv

APPENDIX B

Registration Form and Cover Letter

YORK COLLEGE OF PENNSYLVANIA

Country Club Road, York, Pennsylvania 17405 Telephone (717) 846-7788

September 6, 1977

Dear Freshman Resident:

Thank you for your interest in our free study skills workshop. To be considered, please fill out the attached brief registration form and the Study Skills Surveys Answer Sheet and return them to the Office of Student Activities on or before Friday, September 9. Because enrollment is limited, we will contact those who are selected to participate early during the week of September 12. At that point there will be a brief introductory session to decide when and where it will be convenient to meet.

Again, thank you for your interest and cooperation, and best of luck to you in your first collegiate year!

Sincerely,

Frank Mussano
Director of Student Activities

FM/cv

STUDY SKILLS WORKSHOP REGISTRATION FORM

I am interested in participating in the 1977 fall semester study skills workshop for resident freshmen. If selected, I will attend all four two-hour sessions.

_____
Name

_____
Dormitory Address

_____
Dormitory Telephone #